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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,319	03/29/2001	Richard J. Qian	PW 0275028	2274

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EXAMINER

NGUYEN, CINDY

ART UNIT	PAPER NUMBER
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2171

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/821,319

Applicant(s)

QIAN, RICHARD J.

Examiner

Cindy Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7,9,11-19,21,23-26,28 and 30-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9,11-19,21,23-26,28 and 30-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

This is in response to amendment filed 07/03/03.

### 1. *Specification*

#### Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.  
  
Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.
- (e) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
  - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
  - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and

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problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."

- (f) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (g) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (h) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (i) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet (37 CFR 1.52(b)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (j) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the

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World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

- (k) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

There is no header "Brief Summary of the Invention". Correction is required.

The specification retains objected to because no header, "Brief summary of the invention" has been provided. Even though a heading is not required, it nonetheless helps structure the disclosure so as to become easier to read. As such header is necessary to make the disclosure easier to read.

## **2. Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 3. Claims 1-7, 9, 11, 12, 14, 15, 21 and 31-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Ellenby et al. (U.S 5742521) (Ellenby).**

Regarding claims 1, 11 and 31, Ellenby disclose: a method, a system and a program code of automatic statistics generation and management, comprising:

a head-end system (45, fig. 4 and corresponding text, Ellenby) to receive video input data of a sporting event (col. 5, lines 6-10, Ellenby) and to generate in real-time semantic information (col. 12, lines 36-64, Ellenby) and geometric information based on the video input data without

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input from an operator (col. 10, lines 31-47, Ellenby), wherein the semantic information and the geometric information generated are textual information (col. 10, lines 31-47, Ellenby), and the semantic information includes event model information(col. 9, lines 25-33, Ellenby);

a statistics generation system (46, fig. 4 and corresponding text, Ellenby) to generate sporting statistics based on at least on of the semantic information and the geometric information received from the head-end system (col. 11, lines 44-64, Ellenby); and

a statistics management system (45, fig. 4 and corresponding text, Ellenby) to store (col. 8, lines 56-57, Ellenby) and manage the sporting statistics received from the statistics generation system (col. 9, lines 23-25, Ellenby).

Regarding claims 2 and 32, all the limitations of these claims have been noted in the rejection of claims 1 and 31 above, respectively. In addition, Ellenby disclose: further including storing the sporting statistics (col. 11, lines 21-36, Ellenby).

Regarding claims 3, and 33, all the limitations of these claims have been noted in the rejection of claims 1 and 31 above, respectively. In addition, Ellenby disclose: further including analyzing the sporting statistics (col. 7, lines 59 to col. 8, lines 14, Ellenby).

Regarding claims 4, 12 and 34, most of the limitations of this claim have been noted in the rejection of claims 1, 11 and 31 above, respectively. In addition, Ellenby disclose: further including providing the video input data from at least one video camera located at the sporting event (col. 7, lines 49-59, Ellenby).

Regarding claims 5 and 35, all the limitations of these claims have been noted in the rejection of claims 1 and 31 above, respectively. In addition, Ellenby disclose: further including receiving a query for the sporting statistics (col. 9, lines 50-65, Ellenby).

Regarding claims 6 and 36, all the limitations of these claims have been noted in the rejection of claims 1 and 31 above, respectively. In addition, Ellenby disclose: further including: processing the video input data to generate tracking information (col. 13, lines 27-30, Ellenby); and processing the tracking information to generate the semantic information and the geometric information (col. 14, lines 32-53, Ellenby).

Regarding claims 7 and 37, all the limitations of these claims have been noted in the rejection of claims 1 and 31 above, respectively. In addition, Ellenby disclose: further including analyzing the sporting statistics to discover patterns and predict future trends (col. 24, lines 33-49, Ellenby).

Regarding claims 9, 21 and 38, most of the limitations of this claim have been noted in the rejection of claims 1, 11 and 31 above, respectively. In addition, Ellenby disclose: wherein the input data is from a radio frequency (RF) beacon (col. 9, lines 34-49, Ellenby) .

Regarding claim 14, all the limitations of this claim have been noted in the rejection of claim 11 above. In addition, Ellenby disclose: wherein the head-end system includes:

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a tracking system to receive and process the video input data to generate tracking information(col. 13, lines 27-42, Ellenby); and

a production system to receive and process the tracking information to generate the semantic information and the geometric information (col. 7, lines 49-58, Ellenby).

Regarding claim 15, all the limitations of this claim have been noted in the rejection of claim 11 above. In addition, Ellenby disclose: wherein the statistics generation system includes:

a model manager (stadium model, col. 8, line 66, Ellenby) to access the semantic information and the geometric information (col. 8, lines 65 to col. 9, lines 25, Ellenby); and

a statistics generator to receive and process at least one of the semantic and geometric information from the model manager to generate the sporting statistics (col. 12, lines 27-45, Ellenby).

#### **4. *Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**5. Claims 13, 16-19, 23-26, 28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellenby et al. (U.S 5742521) (Ellenby) in view of Kelts (U.S 2002/0112237).**

Regarding claim 13, all the limitations of this claim have been noted in the rejection of claim 11 above. In addition, Ellenby disclose: the statistics management system to support query



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applications from a user interface (col. 9, lines 41-49, Ellenby). However, Ellenby didn't disclose: further including a gateway connected to the statistics management system to support query applications from a user interface. On the other hand, Kelts discloses: a gateway connected to the statistics management system to support query applications from a user interface (910, fig. 9 and corresponding text). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include a gateway in the system of Ellenby as taught by Kelts. The motivation being to enable the users to communicate via network to provide information and service to the end user.

Regarding claim 16, all the limitations of this claim have been noted in the rejection of claim 11 above. In addition, Ellenby/Kelts disclose: wherein the statistics management system includes: a statistics database to store and manage the sporting statistics (col. 8, lines 28-40, Ellenby); and a data miner (516, fig. 5 and corresponding text, Kelts) to extract and analyze the sporting statistics stored in the statistics database (p. 12, paragraph 0116, Kelts). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include a data miner in the system of Ellenby as taught by Kelts. The motivation being to enable the user to access the system to estimate and analyze information associated with the use of display system data.

Regarding claim 17, all the limitations of this claim have been noted in the rejection of claims 16 and 7 above. It is therefore rejected as set forth above.

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Regarding claim 19, all the limitations of this claim have been noted in the rejection of claim 11 above. In addition, Ellenby/Kelts disclose: wherein the sporting statistics are saved in a predefined Extended Markup Language (XML) schema (fig. 6 and corresponding text, Kelts). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include XML schema in the system of Ellenby as taught by Kelts. The motivation being to enable the user to process data information and convert information to XML format to display information over Internet.

Regarding claim 23, all the limitations of this claim have been noted in the rejection of claims 14-16 above. It is therefore rejected as set forth above.

Regarding claims 18 and 30, all the limitations of these claims have been noted in the rejection of claims 11 and 23 above, respectively. In addition, Ellenby/Kelts disclose: wherein the semantic information is an Extended Markup Language (XML) file (p. 12, paragraph 0126).

Regarding claim 24, all the limitations of this claim have been noted in the rejection of claims 23 and 12 above. It is therefore rejected as set forth above.

Regarding claim 25, all the limitations of this claim have been noted in the rejection of claims 23 and 13 above. It is therefore rejected as set forth above.

Regarding claim 26, all the limitations of this claim have been noted in the rejection of claims 23 and 7 above. It is therefore rejected as set forth above.

Regarding claim 28, all the limitations of this claim have been noted in the rejection of claims 23 and 9 above. It is therefore rejected as set forth above.

*New Claim Rejections*

All new claims have been rejection above.

*Response to Arguments (filed 07/03/03)*

Applicant argues: Ellenby does not disclose, teach or suggest: generate in real-time semantic information and geometric information based on the video input data without input from an operator, wherein the semantic information and the geometric information generated are textual information), and the semantic information includes event model information. In response, Ellenby clearly disclose: generate in real-time semantic information as in a baseball scenario, a player can run, wears a glove on one hand...(see also col. 12, lines 36-64, Ellenby) and geometric information based on the video input data without input from an operator as generated animation of the players in action (see also col. 10, lines 31-47, Ellenby), wherein the semantic information and the geometric information generated are textual information as recreating scenes and events from the past the transaction data system would preface the replay by broadcasting the stadium model for that remote stadium and maintains a database of animated information, computer animation of replays and other events could be provided either by broadcast suing the digital spread spectrum radio...(col. 10, lines 31-47, Ellenby), and the semantic information includes event model information as action data system 48 contains information relating to all aspects of the game of baseball (col. 9, lines 25-33, Ellenby);

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

## **6. Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fraker et al. (U.S 5434789). GPS Golf diagnostic system.

McDonough et al. (U.S 2002/0072815 A1). Portable information system and method for golf play enhancement, analysis and scorekeeping.

Herz (U.S 6029195). System for customized electronic identification of desirable objects.

## **7. Contact Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 703-305-4698. The examiner can normally be reached on M-F: 8:00-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

*CN*  
Cindy Nguyen  
July 23, 2003

*Frantz Coby*  
**FRANTZ COBY**  
**PRIMARY EXAMINER**